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Ms. Magalie R. Salas
Secretary
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, D.C. 20554

WorldCom, Cox, and AT&T ads. Verizon
CC Docket Nos. 00-218, 00-249, and 00-251

Dear Ms. Salas:

Enclosed for filing on behalf of Verizon, please find 4 copies each of Verizon Va's Corrected Rebuttal Testimony On Non-Mediation Issues (Categories I And III Through VII), Advanced Services. Please substitute this revised version for the original version filed August 17, 2001. **The only change to this testimony is as follows:** the Question and Answer on page 65, lines 4 to page 66, line 11 replaces the Question and Answer on page 65, line 4 - 29 of the original testimony.

Please do not hesitate to call me with any questions.

Sincerely,

Kelly L. Faglioni
Counsel for Verizon

KLF/ar
Enclosures

cc: Dorothy T. Attwood, Chief, Common Carrier Bureau (By Overnight Mail)(8 copies)

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Ms. Magalie R. Salas
August 29, 2001
Page 2

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**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
Petition of WorldCom, Inc. Pursuant)	
to Section 252(e)(5) of the)	
Communications Act for Expedited)	
Preemption of the Jurisdiction of the)	CC Docket No. 00-218
Virginia State Corporation Commission)	
Regarding Interconnection Disputes)	
with Verizon Virginia Inc., and for)	
Expedited Arbitration)	
)	
)	
In the Matter of)	CC Docket No. 00-249
Petition of Cox Virginia Telecom, Inc., etc.)	
)	
)	
In the Matter of)	
Petition of AT&T Communications of)	CC Docket No. 00-251
Virginia Inc., etc.)	

**VERIZON VA'S REBUTTAL TESTIMONY ON NON-MEDIATION
ISSUES**

(CATEGORIES I AND III THROUGH VII)

ADVANCED SERVICES

ROSEMARIE CLAYTON
PAUL RICHARD
RICHARD ROUSEY
JOHN WHITE

August 17, 2001

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I. INTRODUCTION

Q. PLEASE STATE YOUR NAME, YOUR POSITION AND YOUR BUSINESS ADDRESS WITH VERIZON.

A. My name is Rosemarie Clayton. I am employed by Verizon Services Corp. ("Verizon")¹ as Product Manager for xDSLs and Line Sharing. My business address is 2107 Wilson Blvd. Arlington, Virginia.

My name is Paul Richard. My business address is 500 Summit Lake Drive, Valhalla, NY. I employed by Verizon as a Senior Specialist in the Wholesale Services Marketing Organization.

My name is Richard Rousey. My business address is 600 Hidden Ridge Blvd. Irving, Texas. I am employed by Verizon as a Senior Specialist in the Wholesale Services Organization.

My name is John White and my business address is 1095 Avenue of the Americas, New York, New York. I am an Executive Director within Verizon's Wholesale Services organization, reporting to the Network Services Department.

Q. ARE YOU THE SAME WITNESSES WHO FILED DIRECT TESTIMONY IN THIS CASE ON JULY 31, 2001?

A. Yes.

¹ As used in this testimony, "Verizon" refers to Verizon Services Corp., and "Verizon VA" refers to Verizon Virginia Inc., the party to this arbitration.

1 **Q. WHAT IS THE PURPOSE OF THE PANEL'S REBUTTAL TESTIMONY**
2 **TESTIMONY?**

3 A. The purpose of the panel's rebuttal testimony is to respond to direct testimony
4 filed by AT&T and WorldCom on issues III-10, V-6, V-9, and IV-28. In
5 addition, the panel sponsors the following Rebuttal Exhibits:

- 6 • **Rebuttal Exhibit ASP-1** – Summary of Industry Analyst Projections of
7 Subscribership to Cable Modem Service Versus xDSL Service;
- 8 • **Rebuttal Exhibit ASP-2** – Verizon Presentation Regarding The
9 Broadband Market;
- 10 • **Rebuttal Exhibit ASP-3** – AT&T July 24, 2001 News Release;
- 11 • **Rebuttal Exhibit ASP-4** – Line Splitting Service Descriptions Developed
12 By The New York DSL Collaborative;
- 13 • **Rebuttal Exhibit ASP-5** – Verizon October 12, 2000 Comments to the
14 Commission in CC Dockets 98-147 and 96-98;
- 15 • **Rebuttal Exhibit ASP-6** – Verizon November 14, 2000 Reply Comments
16 to the Commission in CC Dockets 98-147 and 96-98;
- 17 • **Rebuttal Exhibit ASP-7** – Verizon February 27, 2001 Comments to the
18 Commission in CC Dockets 98-147 and 96-98; and
- 19 • **Rebuttal Exhibit ASP-8** – Verizon March 13, 2001 Reply Comments to
20 the Commission in CC Dockets 98-147 and 96-98.

21 **Q. IN PREPARATION FOR THE PANEL'S REBUTTAL TESTIMONY,**
22 **WHOSE TESTIMONY HAVE YOU REVIEWED?**

23 A. The panel reviewed the direct testimony of C. Michael Pfau on behalf of AT&T
24 and the testimony of Chuck Goldfarb, Alan Buzacott and Roy Lathrop on behalf
25 of WorldCom.

II. ISSUE III-10: LINE SHARING AND LINE SPLITTING

A. RESPONSE TO AT&T

Q. AT&T WITNESS PFAU SPENDS A GREAT DEAL OF HIS TESTIMONY ARGUING THAT VERIZON VA HAS A CURRENT OBLIGATION TO PROVIDE CLECS WITH THE ABILITY TO ENGAGE IN LINE SPLITTING. DOES VERIZON VA'S PROPOSED CONTRACT LANGUAGE SATISFY THIS OBLIGATION?

A. Yes. Under Verizon VA's proposed contract language, AT&T currently has the ability to become involved in line splitting by combining a UNE xDSL-capable loop, a UNE port and transport, and connect to its (or a data partner's) collocated DSLAM, splitter equipment, and end user equipment required for xDSL service, and provide voice and data from this combination of UNEs. Voice and data can be provided by AT&T, or AT&T can partner with another party for data services.

Verizon, using the consensus and priorities reached by the industry in the New York DSL Collaborative (with facilitation from the New York Commission), has agreed to develop enhanced line splitting in its territories nationwide, and Verizon VA's proposed contract language incorporates the results of the collaborative by reference.

Q. DID THE COMMISSION ENCOURAGE PARTIES TO USE STATE COLLABORATIVES AND CHANGE MANAGEMENT PROCESSES TO ADDRESS THE MORE COMPLEX ISSUES ASSOCIATED WITH IMPLEMENTATION OF LINE SPLITTING?

1 A. Yes. As recognized by AT&T Witness Pfau at page 7 of his Direct Testimony,
 2 the Commission encouraged the parties to address the details surrounding
 3 implementation of line splitting through state collaboratives.² This is precisely
 4 what Verizon VA's proposed contract language does. Rather than trying to
 5 resolve all implementation issues in the context of negotiations with one CLEC,
 6 Verizon VA proposes to implement the results of the New York DSL
 7 Collaborative. Rather than resulting in vague and ambiguous line splitting
 8 procedures as contended by AT&T and WorldCom, Verizon VA's proposed
 9 language applies the results of an industry collaborative addressing
 10 implementation issues in great detail, creating a standardized product with input
 11 from all interested parties.

12 **Q. IS VERIZON VA DEVELOPING A SINGLE-ORDER PROCESS TO ADD**
 13 **xDSL SERVICE TO EXISTING UNE-P VOICE CUSTOMERS AS A**
 14 **RESULT OF THE NEW YORK COLLABORATIVE?**

15 A. Yes. Verizon VA's line splitting service descriptions allow a CLEC with a UNE-
 16 P arrangement to submit a single Local Service Request ("LSR") for a line
 17 splitting arrangement. Verizon VA will take the one LSR provided by the CLEC,

² *In re Deployment of Wireline Services Offering Advanced Telecommunications Capability, CC Docket No. 98-147, and In re Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 97-98, Third Report and Order On Reconsideration In CC Docket No. 98-147, Fourth Report and Order On Reconsideration In CC Docket No. 96-98, Third Further Notice of Proposed Rulemaking in CC Docket No. 98-147, and Sixth Further Notice of Rulemaking in CC Docket No. 96-98, FCC 01-26 (rel. Jan. 19, 2001) ("Line Sharing Reconsideration Order") at ¶ 22 n.41 ("We also encourage participants in state collaboratives and change management processes to develop specific ordering procedures associated with a variety" of line splitting scenarios.)*

1 and internally issue three service orders to accommodate the line splitting request.
 2 One order disconnects the Platform service, one order installs the port, and one
 3 order installs the loop. These three orders will be coordinated internally by
 4 Verizon VA, and attempts will be made to re-use the loop facilities. (The ability
 5 to re-use facilities depends whether the loop is xDSL capable). From the CLECs'
 6 perspective, however, this will be a one order process. Even though three internal
 7 orders are generated, the CLECs will be charged for only one order.

8 **Q. AT PAGE 99 OF HIS DIRECT TESTIMONY, AT&T WITNESS PFAU**
 9 **STATES THAT MOST LOOPS CAN BE USED TO PROVIDE ACCESS**
 10 **TO BOTH A TRADITIONAL CIRCUIT SWITCHED NETWORK AND AN**
 11 **ADVANCED SERVICES NETWORK WITH RELATIVELY LITTLE**
 12 **COST. IS THIS CORRECT?**

13 A. In part. There is little disruption or cost for CLECs. However, as this
 14 Commission has already recognized in the *Massachusetts 271 Approval Order*,
 15 Verizon VA has and will incur significant development and circuit conversion
 16 costs to implement line splitting.³ The development costs include those incurred
 17 for designing and coding systems, methods development, training, updating
 18 related systems and retail and wholesale records, and pilot expenses. The

³ *In the Matter of Application of Verizon New England Inc., Bell Atlantic Communications, Inc. (d/b/a Verizon Long distance), NYNEX Long Distance Company (d/b/a Verizon Enterprise Solutions) and Verizon Global Networks Inc., For Authorization to Provide In-Region, InterLATA Services in Massachusetts, CC Docket No. 01-9, Memorandum and Order, FCC 01-130 (rel. April 16, 2001). ("Massachusetts 271 Approval Order") at ¶ 180.*

1 conversion costs include complex rewiring and testing activities in the central
2 office.

3 **Q. AT PAGE 100 OF HIS DIRECT TESTIMONY, AT&T WITNESS PFAU**
4 **SUGGESTS THAT THE ILECs ARE TO BLAME FOR THE “FINANCIAL**
5 **WOES OF DATA LECS.” DO YOU AGREE?**

6 A. No. Indeed, less biased observers of CLEC performance have a very different
7 view. For example one analysis has concluded that there were two factors that led
8 to the CLEC collapse—overly aggressive expansion and inexperienced
9 management teams.⁴ In addition, as one analyst said recently:

10 Buoyed by the giddy Internet craze in 1999 and early 2000,
11 investment money flowed in — particularly to competitive
12 LECs — with little examination of the underlying business
13 plans. ‘Any moron who could put pen to paper could get a
14 million dollars,’ Shapiro says sourly.

15 With investors now wising up, these poorly planned
16 businesses are not getting funding to continue and are
17 dying out. But there still are a number of these ailing
18 companies that haven’t yet breathed their last. “It’s a
19 natural cycle of overcapitalization followed by shakeout,”
20 Shapiro says. “Once that is done you will have some
21 stronger companies that will survive. But it is a long way
22 from being finished.”⁵

23 **Q. AT PAGE 101 OF HIS DIRECT TESTIMONY, AT&T WITNESS PFAU**
24 **ALSO SUGGESTS THAT AS THE SOLE PROVIDER OF A BUNDLED**
25 **VOICE AND ADVANCED DATA OFFER, VERIZON DOMINATES THE**

⁴ James Henry (Bear Sterns), *The Game of CLEC Life*, Xchange Magazine, April 2001.

⁵ K. Brown, “Surviving the Fall,” *Broadband Week*, March 5, 2001,
http://www.broadbandweek.com/news/010305/010305_news_fall.htm.

RESIDENTIAL xDSL MARKET WITHIN ITS SERVICE TERRITORIES.
IS THIS AN ACCURATE STATEMENT?

A. No. AT&T Witness Pfau's claim assumes that Verizon VA—the ILEC—provides advanced data service within its service territories. However, it does not, and is prohibited from doing so at the present time.⁶ Thus, Verizon Advanced Data Inc.—a separate company⁷ with its own separate certificate of public convenience and necessity—provides xDSL services within Verizon VA's serving territories. Verizon VA deals at arms length with VADI, treating it the same as any other CLEC or DLEC. Thus, VADI and CLECs are on equal footing with regard to their ability to use Verizon VA's existing network facilities and systems. However, it is important to note that any carrier can purchase an unbundled loop on which it can place both voice and data to establish a bundled service offering.

Q. IS AT&T WITNESS PFAU CORRECT WHEN HE CONTENDS AT PAGE 106 OF HIS DIRECT TESTIMONY THAT VERIZON DOMINATES (AND

⁶ See *In re Application of GTE Corporation, Transferor, and Bell Atlantic Corporation, Transferee, For Consent to Transfer Control of Domestic and International Sections 214 and 310 Authorizations and Application to Transfer Control of a Submarine Cable Landing License*, Memorandum Opinion and Order, 15 F.C.C.R. 14032 (2000). (“BA/GTE Merger Order”) at ¶ 260 (requiring Verizon to create a “separate affiliate[] to provide all advanced services in the combined Bell Atlantic/GTE region.”). Verizon VA, therefore, no longer offers advanced services.

⁷ BA/GTE Merger Order at ¶¶ 260, n.579, 263 (“the separate advanced services affiliate will be distinct from Bell Atlantic/GTE's in-region telephone companies,” and must “have separate officers, directors, and employees, as well as the requirements to operate independently and to deal at arm's length.”).

1 **POTENTIALLY MONOPOLIZES) THE ADVANCED SERVICES**
2 **MARKET?**

3 A. No. Setting aside the fact that Verizon VA does not offer advanced services at all,
4 no Verizon entity can credibly be said to dominate the advanced services market,
5 which is supported by a wide variety of technologies, many of which no Verizon
6 entity uses to provide any kind of service.

7 **Q. WHAT TECHNOLOGIES COMPETE IN THE ADVANCED SERVICES**
8 **MARKET?**

9 A. There are four main technologies: cable modem, xDSL, satellite, and wireless.⁸
10 Each technology is explained below. While the technologies are different, the
11 companies deploying these technologies compete head-to-head for customers. In
12 fact, as discussed further below, it is cable companies that are currently winning
13 the race for new broadband customers as subscriber use of cable modems to
14 connect with the Internet far outpaces the use of any other technology. Many
15 service providers may chose to use more than one of these technologies to serve
16 various customers. In other words, consumers want high-speed access to the
17 Internet, at this point, do not have a strong preference as to what technology is

⁸ Powerline is another potential technology that is being used in Europe today.

1 used to provide it.⁹ For example, most potential customers do not perceive a
2 difference between xDSL and cable modem service.¹⁰

3 **Q. HOW DO DATA CLECs OPERATE IN VIRGINIA TODAY?**

4 A. Data CLECs have used a variety of means to serve the advanced services market.
5 These means include providing service entirely over their own facilities, as AT&T
6 Broadband does with cable modem service, or collocating equipment in Verizon
7 VA's central offices and leasing unbundled loops or subloops (either as stand-
8 alone or "line-shared" loops), or using wireless technology. All of these carriers
9 are free to invest their own capital, buy the necessary new equipment, and obtain
10 access to the existing Verizon VA network as necessary to provide their
11 competitive advanced services.

12 **Q. PLEASE DESCRIBE THE DIFFERENT TECHNOLOGIES.**

13 A. xDSL Technology is what telephone companies typically use to provide high-
14 speed Internet access over traditional copper lines. The xDSL connection to the
15 Internet is always on and no dialing is required to connect to the Internet.
16 Importantly, certain xDSL services (Asymmetric DSL, or "ADSL,"-type

⁹ United States General Accounting Office Report to the Ranking Minority Member, Subcommittee on Telecommunications, Committee on Energy and Commerce, House of Representatives, *Characteristics and Choices of Internet Users*, at 25, February 2001. Yankee Group, *Residential Broadband: Cable Modem and DSL Reach Critical Mass*, at 10, March 2001.

¹⁰ www.Cyberatlas.com, *Cable or DSL? Consumers See Little Difference*, December 1, 2000.

1 services)¹¹ can share the *same* line with the end user's standard telephone service,
2 without interruption or interference. Thus, a teenager can surf the Internet for
3 information on her favorite band while her mother talks to a business associate
4 about a last minute business trip – at the same time and on the same line. There
5 are also different types, or “flavors,” of xDSL.

6
7 **Cable modem technology** enables cable television providers to deliver high-
8 speed Internet services over the same network of coaxial cables that they use to
9 carry television signals (although, as with xDSL, that network must first be
10 upgraded at substantial cost). Like xDSL, cable modem technology is always on
11 and also has high downstream/download speeds. However, unlike xDSL service,
12 which serves each home with its own dedicated circuit, cable modem Internet
13 access is a shared service, where many homes share the same bandwidth on the
14 coaxial cable. This sharing can affect the speed of service if many other
15 customers in the neighborhood are accessing the Internet at the same time. AT&T
16 Broadband, Cox, Comcast and Adelphia are the main providers of cable modem
17 service in Virginia. Because of the many cable company mergers there are fewer
18 separate cable companies. Moreover, due to exclusive franchises these cable
19 modem service providers typically do not compete with each other in their
20 franchised areas.

¹¹ ADSL is “asymmetric” because it lets the customer download or receive information from the Internet at much faster speeds than he or she can upload data to the Internet. Because most customers care much more about receiving information quickly than uploading information quickly, ADSL is generally viewed as the most attractive DSL flavor for the mass market.

Wireless technologies (either land-based or satellite) currently use radio signals to transmit from a base station antenna or a satellite to receivers (such as an antenna or small dish) located on the customer's rooftop. Today, these technologies allow users to obtain high-speed downloads, but uploading requires use of a conventional telephone line and modem. It is expected that two-way high-speed wireless systems will be available in the near future.

Q. WHO ARE SOME OF THE ADVANCED SERVICES COMPETITORS IN VIRGINIA?

A. Competitors in Virginia include the following.

Cable Modem: Adelphia, AT&T Broadband, Cox Communications, and Comcast.

xDSL: Cavalier, Covad, Network Access Solutions, NTELOS, and VADI.

Fixed Wireless: AT&T, Cingular, Sprint PCS, and Voice Stream.

Satellite: StarBand and Hughes DirectPC

Q. WHAT IS THE DOMINANT TECHNOLOGY IN THE NATIONAL ADVANCED SERVICES MARKET TODAY?

A. While estimates of market share vary, industry analysts agree that on a national basis, cable modem service dominates the advanced services market today, and is projected to maintain its dominance for the next several years. For example, on August 13, 2001, Reuters reported that AOL Time Warner, the nations second largest cable provider, reported 1.4 million subscribers at the end of the second quarter through its Road Runner cable modem service, while Verizon's affiliate

1 had approximately 840,000 digital subscriber line Internet service customers.¹²
2 Estimates by different analysts agree that cable modem service has at least two-
3 thirds of high-speed Internet access subscribers today and even in 2005 will still
4 control well over 50% of the market.¹³ These analyst projections are collected in
5 Rebuttal Exhibit ASP-1. This Commission and the U.S. Commerce Department
6 have likewise found that cable has a significantly greater market share than xDSL
7 at this time.¹⁴ In fact, a Commission report released just this month demonstrates
8 that as of December 31, 2000, subscribership for high-speed Internet connections
9 over xDSL lines lagged considerably behind that of high-speed connections over
10 coaxial cable systems.¹⁵ As Verizon explained in a July 19, 2001 *ex parte*
11 presentation to the Commission (see Rebuttal Exhibit ASP-2), nationally, cable
12 operators are currently the dominant suppliers of residential broadband service
13 having an expected 6.2M subscribers for 2001 representing 70% of the market.

¹² See *USA: Home Internet Service Via Cable Jumps in Q2-Survey*, August 13, 2001, Reuters English News Service, Reuters Limited 2001.

¹³ While fixed wireless and satellite broadband technologies currently represent a smaller part of the broadband market than both cable and DSL, these technologies are expected to have several million customers by 2004, according to these same industry analysts.

¹⁴ United States General Accounting Office Report to the Ranking Minority Member, Subcommittee on Telecommunications, Committee on Energy and Commerce, House of Representatives, *Characteristics and Choices of Internet Users*, at 18, February 2001.

¹⁵ *High-Speed Services for Internet Access: Subscribership as of December 31, 2000*, Industry Analysis Division Common Carrier Bureau, Federal Communications Commission, August 2001 ("*Commission Internet Access Report*").

1 Additionally, the *Wall Street Journal* recently reported that “[c]able’s 3.6 million
2 lines continue to outnumber the two million DSL connections.”¹⁶

3
4 Moreover, as a result of the AT&T/cable mergers, there are fewer cable operators.
5 In addition, in many local markets pursuant to the terms of its franchise, AT&T
6 Broadband is the only cable-based high-speed Internet access service provider,
7 meaning AT&T not only has the first-mover advantage, but also faces no
8 broadband services competition except that which might come, at some point,
9 from xDSL.¹⁷ (Wireless and satellite technologies may provide more widespread
10 competition for cable modem service in the future, but, because of some of their
11 limitations, xDSL is by far the most meaningful alternative – where available.)
12 At this stage in the race, then, cable modem service providers, including AT&T,
13 are the main source of high-speed Internet access competition, especially for the
14 mass market of residential and small business customers. Cable modem
15 technology is the dominant technology and is a *complete bypass* of the ILEC
16 network. In this market, ILECs fill the roll of regulation encumbered new
17 entrant. Furthermore, cable operators have broadband access to twice the number
18 of households compared to the access available through xDSL.

¹⁶ Dow Jones Newswriters, *Broadband Adoption More Than Doubled in 2000, FCC Reports*,” *Wall Street Journal*, August 10, 2001, at B4.

¹⁷ Jerry A. Hausman, J. Gregory Sidak, Hal J. Singer, *Residential Demand for Broadband Telecommunications and Consumer Access to Unaffiliated Internet Content Providers*, *Yale Journal on Regulation*, Winter 2001.

1 As “not just the nation’s largest cable TV company but the leading provider of
 2 integrated residential broadband services,”¹⁸ and one of the largest cable
 3 providers in Virginia, AT&T cannot credibly claim that any Verizon entity
 4 dominates the advanced services market. Indeed, its own briefings with the
 5 financial community demonstrate that after only a year in existence, AT&T
 6 Broadband “is already the industry leader in providing advanced digital services
 7 such as telephony, high-speed data and digital video.”¹⁹

8 **Q. DO CABLE PROVIDERS DOMINATE THE ADVANCED SERVICES**
 9 **MARKET IN VIRGINIA?**

10 A. Yes. Table 6 of the *Commission Internet Access Report* indicates that as of
 11 December 2000, cable modem providers served 78,585 lines in Virginia, while
 12 ADSL providers served only 26,750 lines. The remaining 34,580 high-speed
 13 lines in Virginia were served by other technologies.

14 **Q. ARE THE CABLE MODEM OR WIRELESS/SATELLITE**
 15 **TECHNOLOGIES REGULATED IN THE SAME MANNER AS AN ILEC,**
 16 **OR OTHERWISE REQUIRED TO OPEN THEIR FACILITIES TO USE**
 17 **BY OTHER COMPANIES?**

18 A. No. The cable modem service providers have vigorously and, to date,
 19 successfully opposed any attempt to require any sharing of their facilities by

¹⁸ News Release, AT&T, “AT&T Details Results and Outlines Growth Plans For Broadband Business “More Than a Cable TV Company” (July 24, 2001) (<http://www.att.com/press/item/0,1354,3921,00.html>) (Attached as **Rebuttal Exhibit ASP-3**).

¹⁹ *Id.*

1 competing advanced services providers. This difference in the regulatory
2 treatment of head-to-head competitors already tilted the competitive playing field
3 against xDSL. Indeed, when faced with the prospect of regulatory requirements
4 to provide access to its own network, AT&T's chairman Armstrong responded:

5 It's not fair. It's not right. Worse, it would inhibit industry
6 growth and competition. No company will invest billions
7 of dollars to become a facilities-based broadband services
8 provider if competitors who have not invested a penny of
9 capital nor taken an ounce of risk can come along and get a
10 free ride on the investments and risks of others.²⁰

11 **Q. DO THE CABLE MODEM OR WIRELESS/SATELLITE**
12 **TECHNOLOGIES DEPEND ON OR USE AN ILEC'S NETWORK**
13 **FACILITIES?**

14 A. No, although, as noted above, wireless/satellite providers currently use a standard
15 modem-equipped telephone line for upstream communications while a direct
16 upstream wireless path is being developed.

17 **Q. DO THE CABLE MODEM AND WIRELESS/SATELLITE**
18 **TECHNOLOGIES REQUIRE NEW INVESTMENT BY THE PROVIDER?**

19 A. Yes. Just as providing widespread xDSL service capability requires substantial
20 investment in new equipment for a telephone company, so do cable modem
21 technology and wireless and satellite technology require the provider to invest in
22 and deploy new equipment. In other words, new money and new facilities are
23 required to compete in the advanced services market no matter who you are.

²⁰ C. Michael Armstrong, *Telecom and Cable TV: Shared Prospects for the Communications Future*, speech delivered to Washington Metropolitan Cable Club, Washington, D.C. (Nov. 2, 1998), <http://www.att.com/speeches/item/0,1363,948,00.html>.

1 **Q. PLEASE EXPLAIN.**

2 A. To provide high-speed Internet access, a cable company must invest in new
3 equipment and new technology in a manner similar to what a telephone company
4 must do to provide xDSL. Among other things, the cable providers are extending
5 optical fiber transport facilities closer to the end user and installing equipment that
6 allows the transmission of digital data packets, such as routers, switches, and a
7 cable modem termination system.²¹

8
9 A wireless service provider needs to install a radio transmitter/receiver at each
10 customer's premises and also must install a central antenna.²² Notably, however,
11 providers of wireless service generally can deploy new network technologies
12 much more quickly and with less expense than cable modem service providers or
13 xDSL service providers, which makes wireless a nimble competitive
14 technology.²³ Satellite providers, like wireless providers, need to establish a
15 central transmission site (the satellite) and install devices at the premises of every
16 end user.²⁴

17 **Q. YOU HAVE SAID THAT A TELEPHONE COMPANY NEEDS TO BUY**
18 **AND DEPLOY NEW EQUIPMENT TO PROVIDE xDSL SERVICE. ARE**

²¹ See the Commission's *Second Advanced Services Report*, ¶¶ 30-31 (CC Docket 98-146, FCC 00-290, rel. Aug. 21, 2000).

²² *Id.* at ¶ 44.

²³ *Id.*

²⁴ *Id.* at ¶ 56.

1 **CLECS ABLE TO OBTAIN THE NEW EQUIPMENT THEY NEED ON**
 2 **THE OPEN MARKET?**

3 A. Yes. The Commission found in the *UNE Remand Order* that “advanced services
 4 providers are actively deploying facilities to offer advanced services such as
 5 xDSL across the country” and, indeed, that “cable companies appear to be leading
 6 the incumbent LECs in their deployment of advanced services.”²⁵ The
 7 Commission indicated that marketplace developments suggest that carriers have
 8 been able to secure the necessary inputs to provide advanced services to end users
 9 in accordance with their business plans.²⁶ Ten months later, in August of 2000,
 10 the Commission reiterated that there has been “significant investment in the
 11 facilities needed to provide advanced telecommunications capability . . . and a
 12 proliferation of providers in the marketplace.”²⁷ The Commission added that
 13 “competition [in advanced services] is emerging, rapid buildout of necessary
 14 infrastructure continues, and extensive investment is pouring into this segment of
 15 the economy.”²⁸

16
 17 In short, ILECs and CLECs are on the same footing when it comes to obtaining
 18 and deploying the equipment (such as DSLAMS) needed to provide high-speed

²⁵ *In re Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Third Report and Order and Fourth Further Notice of Proposed Rulemaking, 15 F.C.C.R. 3696 (1999) (“*UNE Remand Order*”) at ¶ 307.

²⁶ *Id.*

²⁷ *Second Advanced Services Report* at ¶ 1.

²⁸ *Id.* at ¶ 8.

Internet access over their own networks. In this respect, the advanced services market is far different from the local exchange services market. In advanced services there is no "legacy" network that was built during years of regulated, franchised service by a single provider. Rather, advanced services represent the "next wave" of communications services and there is no conceptual "incumbent" advantage similar to that of an incumbent carrier in the local exchange field. No one entity and no one technology owns or controls or has ever owned or controlled the advanced services market, or the equipment needed to compete in that market, in the way ILECs "controlled" the local exchange market prior to 1996.

Q. AT&T WITNESS PFAU SUGGESTS AT PAGE 106 OF HIS DIRECT TESTIMONY THAT IF PROPERLY SUPPORTED, LINE SPLITTING COULD HELP REVERSE THE TREND OF HIGHER ILEC PRICES FOR xDSL CAPABILITIES. DO YOU AGREE?

A. No. Indeed, AT&T Witness Pfau's citation of increased xDSL prices by SBC ignores the fact that the reason for that increase was the imposition of regulatory burdens on SBC that increased its costs to provide xDSL service. In testimony filed recently in California, SBC explained that it raised xDSL prices primarily due to increased regulatory costs and other start-up costs associated with its Project Pronto.²⁹ AT&T Witness Pfau's insinuations also ignore the fact that

²⁹ See Rulemaking on the Commission's Own Motion to Govern Open Access to Bottleneck Service and Establish a Framework for Network Architecture Development of Dominant Carrier Networks, CPUC Docket Nos. R-93-04-003/I-93-04-002 (Permanent Line Sharing Non-Costing Phase) Testimony of Ross K. Ireland at 15.

1 xDSL service does not compete in a vacuum, and the prices for xDSL service are
2 constrained by the prices charged by cable modem service providers like AT&T
3 and Comcast, which obviously are still in business and seeking to extend their
4 market-share lead.

5 **Q. IS AT&T WITNESS PFAU CORRECT WHEN HE STATES AT PAGE 110**
6 **OF HIS DIRECT TESTIMONY THAT THE PRIMARY DISTINCTION**
7 **BETWEEN LINE SHARING AND LINE SPLITTING IS PURELY A**
8 **LEGAL DISTINCTION BASED ON WHO PROVIDES THE VOICE**
9 **SERVICE?**

10 A. No. AT&T Witness Pfau's comparison of line sharing and line splitting is
11 oversimplified. Line sharing and line splitting, although similar from a central
12 office wiring perspective, have many differences from an administrative,
13 operational and billing perspective. The most fundamental difference is that in
14 line sharing, Verizon VA's own retail customer pays for the basic loop, switching,
15 and transport costs in their POTS rate. Therefore, under current rates and rate
16 structure, no loop, switching, and transport charges need to be billed to a CLEC
17 beyond any that are incremental to the provisioning of line sharing. This is not
18 the case when a CLEC is using Verizon VA UNE loops, switching, and transport
19 to provide voice service, in that case, there is no Verizon VA retail customer
20 compensating Verizon VA for those costs. Accordingly, Verizon VA must bill
21 those elements as UNEs to the voice provider. This billing difference means that
22 there are two wholesale bills being produced in connection with line splitting,
23 whereas in line sharing there is one wholesale bill and one retail bill for the same

1 line. This fundamental difference causes different billing system and inventory
2 work.

3
4 In addition, line splitting involves different business relationships and rules
5 requiring opening of different channels and methods for processing changes and
6 repairs from those required in line sharing. For example, in line splitting, a voice
7 CLEC may call in a trouble ticket on either a voice or a data line. Also, a voice
8 CLEC acting on behalf of a DLEC may order a disconnect of a data line. These
9 are just two examples, but there are many more. Neither of these situations could
10 occur with line sharing, so it is clear that additional methods, procedures, and
11 internal and external training need to be developed for line splitting.

12
13 Indeed, the fact that different ordering processes, business rules, and OSS for line
14 splitting had to be developed in the New York DSL Collaborative suggests that
15 the line sharing ordering processes, business rules, and OSS were incapable of
16 being used for a line splitting order.

17 **Q. AT&T WITNESS PFAU IMPLIES THAT VERIZON VA'S LINE**
18 **SHARING AND LINE SPLITTING PROCEDURES "HAVE YET TO BE**
19 **DISCLOSED, MUCH LESS TESTED." IS THIS A TRUE STATEMENT?**

20 **A.** No. With respect to line sharing, Verizon VA's proposed language outlines in
21 detail its procedures for line sharing. These are the same procedures that have
22 been used—and included in interconnection agreements with DLECs such as
23 Covad and Rhythms—since Verizon VA first implemented line sharing in June